

Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraph starting at page 32, line 5, with the following rewritten paragraph:

On the contrary, if the amount of photoelectrons exceeds the level causing the saturation of C_{PD} , the photoelectric charges overflows from C_{PD} overcoming the barrier slightly lower than the level $[(+ \square)]$ $(+\alpha)$ of ϕ_T and is progressively accumulated in $C_{FD} + C_S$ of the pixel. At this moment, although as shown in Fig. 3-3, the voltage potential V_{PD} of C_{PD} is gradually decreasing just before C_{PD} is saturated with no variations taking place in the voltage potentials (V_{PD} , V_{CS}) of C_{FD} and C_S and, immediately after C_{PD} is saturated, the voltage potential V_{PD} of C_{PD} is fixed with the resultant consequence of progressive decrease in the voltage potentials (V_{PD} , V_{CS}) of C_{FD} and C_S .

Please replace the paragraph starting at page 32, line 24, with the following rewritten paragraph:

Subsequently, at the end of accumulation time T_{LT} , ϕ_T is returned to be off from the level of $[(+ \square)]$ $(+\alpha)$ and ϕ_S is set to be off to split the potentials of C_{FD} and C_S as shown in Fig. 4-3.